IN THE CLAIMS:

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claims 1-31 (canceled).

32. (previously presented) A system according to claim 34, wherein said second controller stores the selected write data in a second disk unit from said second cache memory.

Claim 33 (canceled).

34. (previously presented)A system for storing data comprising:

a first storage system coupled to a processing unit, said first storage system comprises first disk units and a first controller; and

a second storage system coupled to said first storage system, said second storage system comprises second disk units, a second controller, and a second cache memory,

wherein said first controller receives write data from said processing unit, stores the received write data in a first disk unit, and transmits the received write data and reference information to said second controller, and

wherein said second controller selects write data not to be stored in a second disk unit from write data being stored in said second cache memory according to the received reference information, and scraps the selected write data,

wherein said second controller stores the received write data to said second cache memory, and selects write data to be stored in a second disk unit from write data being stored in said second cache memory according to the received reference information,

wherein said second controller scraps the selected write data not to be stored in a second disk unit, when said first storage system is broken.

35. (previously presented) A system according to claim 34, wherein said first controller transmits the received write data with write time and a reference time to said second controller, and if the write time corresponding to the write data is earlier than the received reference time, said second controller selects said write data to be stored in a second disk unit.

36. (previously presented) A system according to claim 35, wherein said first controller receives write data and write time from said processing unit, and determines said reference time based on the received write time.

37. (previously presented) A system according to claim 35, wherein said second controller transmits a report to said first controller if the received write data is stored into said second cache memory, and

wherein said first controller determines said reference time based on a write time corresponding to a write data for which said first controller does not receive a report from said second controller.

38. (previously presented) A system according to claim 37, wherein said reference time is the earliest write time corresponding to a write data for which said first controller does not receive a report from said second controller.

39. (previously presented) A system according to claim 38, wherein said first storage system further includes a first cache memory, and said first controller stores a write data received from said processing unit into to said first cache memory, reports completion of write request to said processing unit, and after reporting completion of write request, stores said write data from said first cache memory to a first disk unit.

Claim 40 (canceled).

41. (previously presented) A storage system according to claim 43, wherein said second controller stores the selected write data in a second disk unit from said second cache memory.

Claim 42 (canceled).

43. (previously presented) A storage system for use as a secondary storage system and adapted to be coupled system to a primary storage system which is coupled to a processing unit, said storage system comprising:

a plurality of second disk units for storing data;

a second controller; and

a second cache memory,

wherein a first controller of said primary storage system receives write data from said processing unit, stores the received write data in a first disk unit included in said primary storage system, and transmits the receive write data and reference information to said second controller of said storage system,

wherein said second controller stores the received write data to said second cache memory, and selects write data to be stored in a second disk unit from write data being stored in said second cache memory according to the received reference information,

wherein said second controller selects write data not to be stored in a second disk unit from write data being stored in said second cache memory according to the received reference information, and scraps the selected write data, and

wherein said second controller scraps the selected write data not to be stored in a second disk unit, when said primary storage system is broken.

44. (previously presented) A storage system according to claim 43, wherein said first controller transmits the received write data with write time and a reference time to said second controller, and if the write time corresponding to the write data is earlier than the received reference time, said second controller selects said write data to be stored in a second disk unit.

45. (previously presented) A storage system according to claim 44, wherein said first controller receives write data and write time from said processing unit, and determines said reference time based on the received write time.

46. (previously presented) A storage system according to claim 44, wherein said second controller transmits a report to said first controller if the received write data is stored into said second cache memory, and

wherein said first controller determines said reference time based on a write time corresponding to a write data for which said first controller does not receive a report from said second controller.

47. (currently amended) A storage system according to claim 46, wherein said reference time is the earliest write time corresponding to a write data for which said first controller does not receive a report from said second controller.

48. (previously presented) A storage system according to claim 47, wherein said primary storage system further includes a first cache memory, and said first controller stores a write data received from said processing unit into to said first cache memory, reports completion of write request to said processing unit, and after reporting completion of write request, stores said write data from said first cache memory to a first disk unit.

49. (previously presented) A system comprising:

a first storage system coupled to a processing unit, said first storage system comprises first disk units, a first controller, and a first cache memory; and

a second storage system coupled to said first storage system, said second storage system comprises second disk units, a second controller, and a second cache memory,

wherein said first controller receives write data from said processing unit, stores the received write data in said first cache memory, reports completion of writing to said processing unit, and after reporting the completion of writing, transmits the received write data and reference information to said second controller,

wherein said second controller stores the received write data to said second cache memory, and

wherein when failure takes place to said first storage system, said second controller scraps write data being stored in said second cache memory without storing said write data in a second disk unit, according to the received reference information.

50. (previously presented) A system according to claim 49, wherein said second controller selects write data, which can be stored in a second disk unit, from write data stored in said second cache memory, according to the received reference information.

51. (previously presented) A system according to claim 50, wherein said first controller transmits the received write data with write time of the write data to said second controller, and

wherein said second controller reports completion of writing to said first controller after storing the received write data in said second cache memory, and after reporting the completion of writing, selects write data, which can be stored in a second disk unit, from write data being stored in said second cache memory according to the write time of the write data.

52. (previously presented) A system for storing data comprising:

a first storage system coupled to a processing unit, said first storage system comprises first disk units, a first controller, and a first cache memory; and

a second storage system coupled to said first storage system, said second storage system comprises second disk units, a second controller, and a second cache memory,

wherein said first controller receives write data from said processing unit, stores the received write data in said first cache memory, reports completion of writing to said processing unit, and after reporting the completion of writing, transmits the received write data and reference information to said second controller,

wherein said second controller stores the received write data to said second cache memory, and according to the received reference information, selects write data, which can be stored in a second disk unit, from write data being stored in said second cache memory,

wherein said second controller stores the selected write data in a second disk unit, and

wherein when failure takes place to said first storage system, said second controller scraps write data in said second cache memory, without storing said write data in a second disk unit, according to the received reference information.

Claim 53 (canceled).